

compressive residual stresses are formed with focused laser beam spots, on [extend from] said laser shock peened surface, in a range between 100 and 200 joules per square centimeter [to a depth in a range of about 20-50 mils into said region].

sub G2
2. (THRICE AMENDED) A component as claimed in claim 1 further comprising:

said first laser shock peened surface located along said pressure side of said leading edge,

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a second laser shock peened surface located along said suction side of said leading edge and extending radially along at least a portion of said leading edge and extending chordwise from said leading edge, and

a second region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said second laser shock peened surface wherein said deep compressive residual stresses are formed with focused laser beam spots, on [extend from] said laser shock peened surface, in a range between 100 and 200 joules per square centimeter [to a depth in a range of about 20-50 mils into said regions].

sub G3
6. (FOUR TIMES AMENDED) A gas turbine engine compressor blade comprising:

a metallic compressor blade airfoil having a leading edge and a trailing edge and a pressure side and a suction side,

at least a first laser shock peened surface on a first side of said airfoil,

said laser shock peened surface extending radially along at least a portion of said leading edge and extending chordwise from said leading edge, and

a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said laser shock peened surface wherein said deep compressive residual stresses are formed with focused laser beam spots, on [extend from] said laser shock peened surface,

in a range between 100 and 200 joules per square centimeter
[to a depth in a range of about 20-50 mils into said region].

sub G4
7. (THRICE AMENDED) A compressor blade as claimed in claim 6 further comprising:

sub G2
said first laser shock peened surface located along said pressure side of said leading edge,

a second laser shock peened surface located along said suction side of said leading edge and extending radially along at least a portion of said leading edge and extending chordwise from said leading edge, and

a second region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said second laser shock peened surface wherein said deep compressive residual stresses are formed with focused laser beam spots, on [extend from] said laser shock peened surface, in a range between 100 and 200 joules per square centimeter [to a depth in a range of about 20-50 mils into said regions].

sub G3
11. (FOUR TIMES AMENDED) A gas turbine engine compressor blade comprising:

a compressor blade metallic airfoil having a leading edge and a trailing edge,

at least a first laser shock peened surface on at least one side of said airfoil,

said first laser shock peened surface extending radially at least along a portion of said trailing edge and extending chordwise from said trailing edge, and

a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said first laser shock peened surface wherein said deep compressive residual stresses are formed with focused laser beam spots, on [extend from] said laser shocked peened surface, in a range between 100 and 200 joules per square centimeter [to a depth in a range of about 20-50 mils into said region].